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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,830	06/26/2003	Himansu M. Gajiwala	2507-5300.1US (21870-US-0)	7592
24247	7590	06/03/2005	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			RONESI, VICKEY M	
			ART UNIT	PAPER NUMBER
			1714	
DATE MAILED: 06/03/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/608,830

Applicant(s)

GAJIWALA, HIMANSU M.

Examiner

Vickey Ronesi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/26/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-6, drawn to a composition, classified in class 524, subclass 464.
  - II. Claims 7-20, drawn to a rocket motor insulation, classified in class 523, subclass 138.

2. The inventions are distinct, each from the other because:

Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful in routine rubber applications including hoses, gaskets, cushions, etc (see paragraph 0037 of applicant's specification) and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. It is noted that the method of insulating a rocket motor (claims 14-20) has been grouped with the rocket motor article with an insulation material (claims 7-13) given that the method steps do not serve to distinguish from the article limitations.

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4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Joseph A. Walkowski on 5/26/2005 a provisional election was made WITH traverse to prosecute the invention of Group II, claims 7-20.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-6 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### *Specification*

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: there is no support in the specification for all noncyclic hydrocarbons as recited in claims 10 and 17. In paragraph 0030 of applicant's specification, the term "noncyclic hydrocarbon" describes only polyvinyl chloride and is not intended to support claims which encompass all polymeric organic fillers comprising a noncyclic hydrocarbon.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 7-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 7, 8, 14, and 15, it is not made clear if the flame retardant and polymeric organic filler are necessarily distinct ingredients since the polymeric organic filler can also behave as a flame retardant. One source of the confusion lies in paragraphs 0029 and 0032 of applicant's specification which states that an example of a combination of an inorganic and organic flame retardant is two inorganic flame retardants and that PVC (i.e., polymeric organic filler) acts as a flame retardant.

With respect to claims 9-13 and 16-20, they are rejected for being dependent on a rejected claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 7, 8, 14, 15, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Herring (US 4,878,431).

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Herring discloses elastomeric insulating materials for rocket motors (col. 2, lines 66-68; col. 7, lines 20-46) comprising crosslinkable elastomeric polymers such as EPDM (col. 3, lines 51-61); polyaramide pulp, i.e., polymeric organic filler (col. 3, lines 1-18); and organic and inorganic flame retardants (col. 4, lines 41-55). See Tables C and D and Table 1, column A.

In light of the above, it is clear that Herring anticipates the presently cited claims.

9. Claims 7-11, 14-18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Guillot et al (US 6,566,420, cited on IDS dated 6/26/2003).

Guillot et al discloses an EPDM rocket motor insulation (col. 5, lines 24-25; col. 30, lines 50-55) comprising EPDM (col. 7, lines 6-26; col. 23, lines 52-67); polymeric organic filler such as adhesion-promoting secondary polymers (e.g., chlorosulfonated polyethylene and polychloroprene) (col. 9, lines 53-60) and aramid fibers (col. 23, lines 39-51); and both inorganic and organic flame retardants (Table 4 in col. 3 and Table 18 in col. 24)

In light of the above, it is clear that Guillot et al anticipates the presently cited claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9-13 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herring (US 4,878,431) in view of Whelan (US 4,246,359).

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The discussion with respect to Herring in paragraph 8 above is incorporated here by reference.

Herring teaches the use of flame retardant additives such as chlorinated organic compounds with antimony oxide or hydrated alumina (col. 4, lines 41-55), however, it does not teach the use of a polymeric organic compound such as polyvinyl chloride. Although Herring exemplifies the use of a chlorinated hydrocarbon as the organic compound, note that it does not restrict the use of other chlorinated organic compounds.

Whelan discloses a flame retardant for hydrocarbon diene rubbers comprising a synergistic combination of a halogen containing organic compound such as polyvinyl chloride, alumina trihydrate, and an iron oxide (col. 1, line 66 to col. 2, line 6). Whelan teaches that the halogen-containing organic compound may be non-polymeric or polymeric, including chlorine-containing polymers, e.g., polyvinyl chloride (col. 3, line 19-25) and that the selection of the appropriate halogen containing organic compound should be consistent with the target physical properties of the finished composition (col. 3, lines 25-33).

Therefore, absent a showing of surprising and unexpected results, it is the examiner's position that it would have been well within the capabilities of one of ordinary skill in the art to utilize an appropriate chlorinated compound in Herring, including those polymeric organic compounds within the scope of the present claims, and thereby arrive at the presently cited claims. Should applicant argue criticality of a polymeric organic compound in the inventive composition, it will be noted that applicant's comparative data provides no probative value to support to such an assertion.

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*Contact Information*

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

5/27/2005

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